

In the claims:

1. (Previously Presented) In a process for the preparation of a catalyst for the production of ethylene oxide comprised of silver supported on an alumina carrier, the improvement which comprises subjecting the carrier to aqua-thermal treatment prior to deposition of silver, such aqua-thermal treatment comprising a sequential series of at least two carrier washings with intermediate carrier calcination at a temperature above 200°C.
2. (Previously Presented) The process of claim 1 wherein the said aqua-thermal treatment comprises a sequential series of at least two carrier washings with intermediate carrier calcination at a temperature in the range 300°C to 1000°C.
3. (Previously Presented) The process of claim 1 wherein the said aqua-thermal carrier treatment comprises a sequence of carrier wash and carrier calcination cycles, such that the carrier is first subjected to a wash cycle which includes sequential washes numbering from one to five, and then the carrier is calcined at a specified temperature above 2000°C before being subjected to a further wash cycle which includes from one to five individual carrier washes.
4. (Previously Presented) The process of claim 3 wherein the sequence is repeated until the carrier is subjected to a total of from two to five wash cycles, each wash cycle including from one to five individual carrier washes, and from one to four calcination cycles positioned between successive wash cycles.
5. (Canceled).
6. (Previously Presented). The process of claim 1 wherein the said carrier calcination is at least 0.5 hours in duration.
7. (Original) The process of claim 6 wherein the said carrier calcination is performed in air or other gaseous environment including oxygen.

8. (Original). The process of claim 6 wherein the said carrier calcination is performed in a gaseous environment that is essentially free of oxygen.
9. (Previously Presented) The process of claim 1 wherein the carrier is heated to 50-1000°C after the aqua-thermal treatment.
10. (Original) The process of claim 1 wherein the said aqua-thermal treatment comprises carrier washing in water that is essentially free from impurities.
11. (Previously Presented) The process of claim 1 wherein the said aqua-thermal treatment comprises carrier washing in aqueous solutions of ammonium fluoride, such that the molar concentration of ammonium fluoride is between 0.0001 and 5.0.
12. (Previously Presented) The process of claim 1 wherein the said aqua-thermal treatment comprises carrier washing in aqueous solutions of mineral acids including hydrohalic; hydrooxyhalic acids; the oxyacids of nitrogen, phosphorus and sulfur; carboxylic acids, sulfonic acids; or phosphonic acids, such that the molar concentration of hydronium ions is between 0.0001 and 5.0.
13. (Previously Presented) The process of claim 1 wherein the said aqua-thermal carrier treatment comprises carrier washing in aqueous solutions of salts of alkali metal ions (Group IA), alkaline earth metal ions (Group IIA) or ammonium ion, with acetate, carbonate, hydroxide, halide, nitrate, oxalate, phosphate, sulfate or the like, such that the molar concentration of the salt is between 0.0001 and 5.0.
14. (Currently Amended) The ethylene oxide catalyst carrier prepared by the process of claim 1.
15. (Currently Amended) An ethylene oxide catalyst comprising silver supported on the carrier prepared by the process of claim 1.